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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|--|----------------------|---------------------|------------------|
| 10/584,031 | 06/22/2006 | Ralph Gronau | AP 10853 | 6888 |
| | 52203 7590 01/18/2011 CONTINENTAL TEVES, INC. | | EXAMINER | |
| ONE CONTINI | ENTAL DRIVE | | SY, MARIANO ONG | |
| AUBUKN HILI | LLS, MI 48326-1581 | | ART UNIT | PAPER NUMBER |
| | | | 3657 | |
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| | | | MAIL DATE | DELIVERY MODE |
| | | | 01/18/2011 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | |
|---|--|---|-------------|
| Office Action Commence | 10/584,031 | GRONAU ET AL. | |
| Office Action Summary | Examiner | Art Unit | |
| | MARIANO SY | 3657 | |
| The MAILING DATE of this communication app Period for Reply | pears on the cover sheet with the c | orrespondence ad | ldress |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period was pailing to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONEI | I. lely filed the mailing date of this co (35 U.S.C. § 133). | |
| Status | | | |
| Responsive to communication(s) filed on 10 No. 2a) ☐ This action is FINAL. 2b) ☐ This 3) ☐ Since this application is in condition for allowar closed in accordance with the practice under Example 2. | action is non-final. nce except for formal matters, pro | | e merits is |
| Disposition of Claims | | | |
| 4) ☐ Claim(s) 12-18 is/are pending in the application 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 12-18 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or | wn from consideration. | | |
| Application Papers | | | |
| 9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acce Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex | epted or b) objected to by the Eddrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj | 937 CFR 1.85(a). ected to. See 37 CF | , , |
| Priority under 35 U.S.C. § 119 | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority documents * See the attached detailed Office action for a list | s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)). | on No ed in this National | Stage |
| Attachment(s) 1) \(\overline{\text{N}} \) Notice of References Cited (PTO-892) | 4) ☐ Interview Summary | (PTO-413) | |
| 2) Notice of Treferences Gred (170-032) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | ite | |

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DETAILED ACTION

1. The amendment filed on November 10, 2010 has been received.

2. It is quite hard to understand the claimed invention without drawings and/or graphs of the brake system. Examiner would like to request from the Applicants to supplement drawings and/or graphs regarding the invention.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 14-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Pueschel et al. (US 6,715,846).

Pueschel et al. disclosed, as shown in fig. 1-4, a method for controlling a pressure buildup in an electronically controllable brake system, where the brake system includes a tandem master brake cylinder 16, a vacuum brake booster 14, and at least one additional pressure source (pump) 25, 25' for brake force assistance, which is drivable by a controlling unit and the pressure of which can be applied to wheel brakes 10-13, the method comprising the steps of detecting an approach of an operating point defined by a minimum predetermined ratio between an auxiliary force of the booster and

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an actuating force, detecting a pressure gradient in the master cylinder and, in the event of a detected approach of the operating point of the vacuum brake booster and when a pressure gradient limit value of the detected master brake cylinder pressure gradient is exceeded, lowering the operating point of the vacuum booster by a predetermined operating point-reduction pressure value when an approach of the operating point of the vacuum booster is detected and the pressure gradient limit value of the established master cylinder pressure gradient is exceeded, and thus establishing a corrected operating point, replacing the operating point, which corrected operating point causes activation of the additional pressure source for the purpose of building up additional brake pressure, see col. 5, lines 48-67, col. 6, lines 1-67, and col. 7, lines 1-4.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in

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order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pueschel et al.

Pueschel et al. was silent to disclose wherein the pressure gradient limit value is in a range from 150 bar/s to 250 bar/s, and wherein the additional pressure source for brake force assistance is activated when the pressure gradient limit value is exceeded for a minimum time period in a range of 10 ms to 100ms.

It would have been obvious to one of ordinary skill in the art of providing the master cylinder with the pressure gradient limit value in a range from 150 bar/s to 250 bar/s and also wherein the additional pressure source for brake force assistance is activated when the pressure gradient limit value is exceeded for a minimum time period in a range of 10 ms to 100ms in order to provide additional brake force depending upon the size and weight of the vehicle.

8. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pueschel et al. in view of Quirant et al. (US 2004/0251739).

Pueschel et al. failed to disclose wherein the approach of the operating point of the vacuum brake booster is detected according to a stored calibrated booster characteristic curve.

Quirant et al. teaches wherein the approach of the operating unit of the vacuum booster is detected according to a stored calibrated booster characteristic curve.

It would have been obvious to one of ordinary skill in the art to merely provide the known approach of the operating unit of the vacuum booster is detected according to a stored calibrated booster characteristic curve into the brake system of Pueschel et al., as taught by Quirant et al., in order to monitor the performance of the vacuum brake booster.

Response to Arguments

9. Examiner has considered all arguments in the Remarks but are moot based on new grounds of rejection.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARIANO SY whose telephone number is (571)272-7126. The examiner can normally be reached on Mon.-Fri. from 8:30 A.M. to 2:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi, can be reached on 571-272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/MS/

January 10, 2011

/Robert A. Siconolfi/

Supervisory Patent Examiner, Art Unit 3657

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